

REMARKS

Please favorably consider the application in view of the above amendments and the following remarks.

Disposition of Claims

Claims 1-11 are pending in this application. Claims 1, 8, and 9 are independent. The remaining claims depend, directly or indirectly, from claims 1 and 9. New dependent claims 12 and 13 have been added by this response. Support for the new dependent claims may be found, for example, in paragraph [0046] of the instant specification.

Drawings

As discussed above, the legends for Figures 1, 2A, 2B, 2C, 2D, and 2E have been amended to include the phrase “Prior Art.” Accordingly, withdrawal of the objections associated with the drawings is respectfully requested.

Specification

As discussed above, a substitute specification and a replacement abstract have been included in this response. In addition, the Applicant respectfully asserts that there is sufficient support in the specification to support all the claim limitations. This issue is discussed below in the section entitled “Rejection(s) under 35 U.S.C. §112.” In view of the above, withdrawal of the objections associated with the specification and abstract is respectfully requested.

Claims

Claims 3-6 and 11 have been amended to remove multiple-dependencies.

Rejection(s) under 35 U.S.C. §112

The Examiner has rejected claims 4 and 10 for lack of antecedent basis and claims 4-7, 10 and 11 under 35 U.S.C. §112, ¶1 for failing to comply with the enablement requirement. The rejection is respectfully traversed.

The Applicant respectfully asserts that the limitation “a control unit for controlling the delay amount of the variable delay circuit based on the delay amount measured by the delay amount unit” is enabled by teachings in paragraphs [0038], [0051], and [0052]. More

specifically, the specification teaches that “in a control step, the delay amount of the delay step is controlled based on the delay amount measured in the delay amount measurement step (S106)” (Instant Specification, paragraph [0051]). Further, the specification teaches that “in the delay amount measurement step, the frequency of the oscillating signal oscillated by feeding back the timing signal to the delay step in the signal feedback step is measured, and the delay amount of the delay step is calculated on the basis of the measured frequency of the oscillating signal” (Instant Specification, paragraph [0052]). Finally, the specification teaches that “the frequency counter **18** counts the number of circulations of the oscillating signal around the loop including the variable delay circuit unit **14** and the signal feedback unit **50** for a predetermined time. The delay amount of the variable delay circuit unit **14** is calculated on the basis of the number of circulations of the oscillating signal which is measured.” (Instant Specification, paragraph [0038])).

In view of the above teachings in the specification and the corrections made to Figure 3, the Applicant respectfully asserts that the limitation “a control unit for controlling the delay amount of the variable delay circuit based on the delay amount measured by the delay amount unit” as recited in claims 4 and 10 has antecedent basis in the specification and is enabled by the specification. Accordingly, withdrawal of this rejection is respectfully requested.

Rejection(s) under U.S.C. §103

Claims 1-3 and 9 are rejected under 35 U.S.C. §103(a) as being obvious over the admitted prior art in Figure 1 in view of U.S. Patent No. 5,604,468 (“Gillig”). This rejection is respectfully traversed.

The Examiner has acknowledged that Figure 1 does not teach or suggest a modulating unit as recited in the aforementioned claims. However, the Examiner has asserted that Gillig teaches a modulation unit as recited in the aforementioned claims, the Applicant respectfully disagrees. Specifically, the claims recite a “modulation unit for modulating said frequency of said reference signal generated by the reference signal generating unit” (independent claim 1) or “a modulation step of modulating a frequency of said referenced signal” (independent claim 9), thus, both claims require modulation of a *reference signal*. Gillig fails to teach a modulation unit or step of modulation which acts to modulate a reference signal. Rather, Gillig teaches a temperature dependent frequency oscillator **202** which independently generates an oscillating

signal (*i.e.*, the temperature dependent frequency oscillator does not receive an input signal which it subsequently modulates and then outputs) (*See* Gillig, Figure 6).

In view of the above, Gillig does not teach or suggest that which is lacking in the admitted prior art. Accordingly, withdrawal of this rejection is respectfully requested.

Claim 8 is rejected under 35 U.S.C. § 103(a) as being obvious over the admitted prior art in view of U.S. Patent No. 6,597,752 (“Okayasu”). The Applicant respectfully asserts that Okayasu is not valid prior art in view of 35 U.S.C. §103(c). Specifically, because Okayasu qualified as 35 U.S.C. §102(e) prior with respect to the claimed invention and Okayasu was commonly owned by Advantest Corporation at the time invention was made, Okayasu is not valid prior art. For purposes of the claimed invention, the constructive date of invention is considered to be the earliest filing date (*i.e.*, October 24, 2001). Evidence of common ownership at the time the invention was made (*i.e.*, the constructive filing date) is attached in the form of an assignment recordation of Okayasu to Advantest Corporation and an assignment recordation of the present application to Advantest Corporation. In view of the above, the Applicant respectfully requests that the Examiner withdraw the rejection.

New claims

New dependent claims 12 and 13 have been added by this reply. The new dependent claims are allowable for at least the same reasons discussed above with respect to the independent claims. Moreover, neither the applicant’s admitted prior art nor Gillig teach or suggest a modulation unit that modulates the frequency of a referenced signal *within a few picoseconds to a few tens of picoseconds*.

Conclusion

Applicant believes this reply is fully responsive to all outstanding issues and places this application in condition for allowance. If this belief is incorrect, or other issues arise, the Examiner is encouraged to contact the undersigned or his associates at the telephone number listed below. Please apply any charges not covered, or any credits, to Deposit Account 50-0591 (Reference Number 02008.157001).

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Attachments (Substitute Specification)

(Replacement Figures)

(Copy of Assignment Recordation of Okayasu to Advantest Corporation)

(Copy of Assignment Recordation of Present Application to Advantest Corporation)

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AMENDMENTS TO THE DRAWINGS

Please amend the figures as shown in the enclosed replacement sheets. The attached sheets of drawings were amended to include the legend "Prior Art" on Figures 1, 2A, 2B, 2C, 2D, and 2E. Additionally, Figure 3 has been amended for consistency with the specification. Specifically, the timing signal feedback line was errantly omitted. Support for the aforementioned amendment may be found, for example, in paragraph [0037], lines 1-7, paragraph [0050], lines 2-7, and paragraph [0051], lines 3-8 of the instant specification). No new matter has been added.